

## **Summary of Calico Mountains Complex Wild Horse Deaths at the Indian Lakes Wild Horse and Burro Facility in Fallon, NV**

(December 29, 2009 to February 24, 2010)

During the last two months, approximately 54 wild horses recently gathered from the Calico Mountains Complex in Nevada have died or been euthanized after arrival at the Indian Lakes holding facility in Fallon, NV. The majority of these deaths were the result of metabolic failure in older pregnant mares in poor body condition with a heavy parasite load. These mares were thin due to raising a foal this year, having limited access to forage due to winter range conditions and trying carry a developing foal as well. The metabolic state of some of these mares reaches a point of no return where, even with free choice feed, there is a negative energy balance and mares cannot meet the metabolic demands of gestation and their own survival despite having access to appropriate an amount and type of feed. This condition is called hyperlipemia or refeeding syndrome.

Attached are laboratory and necropsy reports supporting this diagnosis:

**Necropsy:** Reports typically show fatty deposits in liver and/or kidneys. This is from breakdown of body fats to meet energy needs. Blood samples taken at this time show milky white serum and plasma.

**Blood Chemistries:** Reports show metabolic failure associated with liver (ALKP,GGT,TBIL,LDH) and/or kidney (UREA,CREA) failure.

Treatment provided for these horses includes separation from the general population into smaller pens where no competition for feed occurs, free choice feed and rest. Many mares afflicted with a mild form of this syndrome have recovered.

High levels of parasite infection are noted in these horses, and this contributes to a negative energy balance and loss of body condition.

**Treatment:** Horses are being dewormed orally with a liquid ivermectin product as part of the adoption preparation protocols. Most horses show considerable improvement after deworming and access to sufficient and appropriate feed.

Richard Sanford, DVM

NV# 565